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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,537	12/12/2001	Sharad Sambhwani	021202-002000US	3645
20350	7590	10/19/2005	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP				MURPHY, RHONDA L.
TWO EMBARCADERO CENTER				
EIGHTH FLOOR				
SAN FRANCISCO, CA 94111-3834				
				ART UNIT
				PAPER NUMBER
				2667

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/015,537	SAMBHWANI ET AL.
	Examiner	Art Unit
	Rhonda Murphy	2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-23 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-23 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 29 March 2002 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because applicant has submitted informal drawings. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1- 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao et al. (US 2003/0063656) in view of Tsuneki et al. (US 2002/0024942).

**Regarding claims 1 and 12,** Rao teaches a system for identifying a scrambling code from signals received from a base station, comprising: a scrambling code generator configured to generate a master scrambling code (page 1, paragraphs 4 and 5; PN code sequences are produced by a code generator); control logic configured to generate a plurality of individual scrambling codes based on the master scrambling code (page 1, paragraph 9; page 2, paragraph 22), the plurality of individual scrambling

codes being sequential and any two adjacent individual scrambling codes having a predetermined chip offset (page 1, paragraph 9; page 2, paragraph 22); and a plurality of correlators configured to perform correlations and generate correlation results (page 4, paragraphs 32-33), each correlator configured to correlate the received signals with a corresponding one of the plurality of individual scrambling codes and generate corresponding correlation results (page 4, paragraphs 32-33).

Although it is well known in the art for correlators to operate in parallel, Rao fails to explicitly disclose the correlators performing their correlations in a parallel manner.

However, Tsuneki discloses parallel correlations (page 2, paragraph 17).

In view of this, it would have been obvious to one skilled in the art to modify Rao's system by incorporating parallel correlators for the purpose of performing correlation simultaneously.

**Regarding claims 2 and 13,** Rao teaches the above system wherein the correlation results generated by the plurality of correlators are evaluated to identify the scrambling code from the received signals thereby allowing the identity of the base station which transmitted the received signals to be identified (page 2, paragraph 22; thus identifying the scrambling code group in which the base station belongs).

**Regarding claims 3 and 16,** Rao teaches the system described above in the rejection of claim 1. Rao fails to explicitly disclose the plurality of correlators performing their correlations in a real-time manner.

However, real-time correlation is known in the art for rapid correlation. It would have been obvious to include real-time correlation into Rao's system for the purpose of

eliminating a buffering step to provide faster correlation.

**Regarding claims 4 and 17**, Rao teaches a mobile terminal incorporating the system as recited in claim 1. (Fig. 1, mobile 106; page 2, paragraph 18).

**Regarding claims 5 and 18**, Rao teaches a system wherein the base station is located in a W-CDMA communication network (page 2, paragraph 18).

**Regarding claim 6**, Rao teaches a system for identifying a scrambling code from signals received from a base station, the base station belonging to one of a plurality of base station groups in a communication network (Fig. 1, page 1, paragraphs 4 and 5). Rao further teaches the same limitations described above in the rejection of claim 1).

**Regarding claim 7**, Rao teaches a system wherein the master scrambling code has a period determined by a correlation length and a predetermined group chip offset (page 2, paragraphs 21-22).

**Regarding claim 8**, Rao teaches a system wherein the predetermined group chip offset is determined by number of base stations within a base station group and the predetermined chip offset (page 1, paragraphs 5-6).

**Regarding claim 9**, Rao teaches the same limitations described in the rejection of claim 3.

**Regarding claim 10**, Rao teaches the same limitations described in the rejection of claim 4.

**Regarding claim 11**, Rao teaches the same limitations described in the rejection of claim 5.

**Regarding claim 14**, Rao teaches a method wherein the base station belongs to one of a plurality of base station groups in a communication network and the step of generating the master scrambling code further comprises: selecting a correlation length (page 2, paragraphs 21-22); and generating the master scrambling code using the selected correlation length and a predetermined group chip offset (page 2, paragraphs 21-22).

**Regarding claim 15**, Rao teaches a method wherein the predetermined group chip offset is determined by number of base stations within a base station group and the predetermined chip offset (page 1, paragraphs 5-6).

**Regarding claim 19**, Rao teaches a system for identifying a scrambling code from signals received from a base station, comprising: means for generating a master scrambling code (page 1, paragraphs 4 and 5; PN code sequences are produced by a code generator); means for generating a plurality of individual scrambling codes, wherein the plurality of individual scrambling codes are sequential and any two adjacent individual scrambling codes are separated by a predetermined chip offset (page 1, paragraph 9; page 2, paragraph 22); and means for correlating the received signals with each of the plurality of individual scrambling codes and generating correlation results therefor (page 4, paragraphs 32-33).

Although it is well known in the art for correlators to operate in parallel, Rao fails to explicitly disclose the correlators performing their correlations in a parallel manner.

However, Tsuneki discloses parallel correlations (page 2, paragraph 17).

In view of this, it would have been obvious to one skilled in the art to modify Rao's system by incorporating parallel correlators for the purpose of performing

correlation simultaneously.

**Regarding claim 20**, Rao teaches a system further comprising: means for evaluating the correlation results to identify the scrambling code from the received signals thereby allowing the identity of the base station which transmitted the received signals to be identified (page 2, paragraph 22; thus identifying the scrambling code group in which the base station belongs).

**Regarding claim 21**, Rao teaches a system described above in the rejection of claim 19. Rao fails to explicitly disclose the plurality of correlators performing their correlations in a real-time manner.

However, real-time correlation is known in the art for rapid correlation. It would have been obvious to include real-time correlation into Rao's system for the purpose of eliminating a buffering step to provide faster correlation.

**Regarding claim 22**, Rao teaches a mobile terminal utilizing the system as recited in claim 19 (Fig. 1, mobile 106; page 2, paragraph 18).

**Regarding claim 23**, Rao teaches a system wherein the base station is located in a W-CDMA communication network (page 2, paragraph 18).

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

\*Lee (US 6,894,996) discloses an apparatus and method for searching a base station in an asynchronous mobile communications system.

\*Zhou et al. (US 2003/0012270) discloses a receiver.

\*Aramaki (US 2002/0041581) discloses a CDMA radio receiving apparatus and cell search method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy

Examiner  
Art Unit 2667

rlm



CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2000 10/17/05